

# GUNNISON-DOLORES RIVER WATERSHED

Ranking Criteria FY-03

12/9/02

## WATER

A Minimum score of 35 points is necessary to be eligible

### SECTION I: DELIVERY

1) Improve stream water quality by installing a permanent instream diversion structure designed to eliminate annual heavy equipment disturbance of the stream channel. (20 points)	_____points
2) Improve the control of diverted water with the installation of a positive shut off gate at the water source. (10 points)	_____points
3) Control irrigation delivery ditch <u>gully</u> erosion with the installation of pipe, structures, or new ditch grade. (10 points)	_____points
4) Improve the management of diverted water with the installation of a measuring devise at the water source. (5 points)	_____points
5) Eliminate irrigation delivery ditch <u>seepage</u> with the installation of one of the following: Points/feet of ditch treated, <b>maximum of 30 points</b> <ul style="list-style-type: none"><li>• Install irrigation ditch lining with soil amendments i.e. bentonite. 5 points</li><li>• Install fabric lined ditch 10 points</li><li>• Install concrete lined ditch 15 point</li><li>• Install irrigation pipeline 20 points</li></ul>	_____points
6) Construct irrigation regulating reservoir ( < 10 acre feet) to regulate adequate delivery of water to irrigated fields. (5 points)	_____points

**SECTION II: ON-FIELD**

<b>1)</b> Install structures for water control to regulate irrigation water delivered to the field. (Not risers on pipeline) (10 points)	_____points
<b>2)</b> Improve the management of diverted water with the installation of a measuring devise at the field. (5 points)	_____points
<b>3)</b> Install structures for water control to better distribute water within the field i.e. check structures, turn out slide gates, division boxes, etc. (5 points/structure-maximum of 20 points)	_____points
<b>4)</b> Improve irrigation efficiency, reduce deep percolation, and irrigation induced erosion by converting: ( <b>Select only one</b> ) <ul style="list-style-type: none"><li>• In field dirt delivery ditch to pipe or lined delivery to open (wild) flood system. (5 points)</li><li>• Dirt ditch to lined ditch with siphon tubes (7 points)</li><li>• Dirt ditch (wild flooding) to gated pipe (10 points)</li><li>• Gated Pipe to Sprinkler or Drip System (15 points)</li><li>• Flood to Sprinkler or Drip System<ul style="list-style-type: none"><li>• Flood to Guns or Side-roll (30 points)</li><li>• Flood to pivot or drip (35 points)</li></ul></li><li>• Dirt ditch to pipe to gated pipe (20 points)</li><li>• Poor contour ditch system to improved contour ditch system (3 points)</li></ul>	_____points
<b>5)</b> Reduce deep percolation, and irrigation erosion caused by irrigation tail-water by: (max. of 5 points) <ul style="list-style-type: none"><li>• Install tail-water ditch on non-erosive grade. (5 points)</li><li>• Install erosion control structures i.e. concrete or pipe drops (5 points)</li></ul>	_____points
<b>TOTAL POINTS</b> _____	
<b>Tie Breaker:</b> Cost/acre treated (Acres that will realize resource improvement due to application of practices). (Lowest cost per acre treated receives highest priority)  <b>Cost per Acre Treated</b> _____	

## Ranking Criteria FY-03 EQIP

### RANGE & GRAZING LAND

12/9/02

**A minimum score of 20 points is necessary to be eligible**

<p><b>1)</b> Improve grazing land health, by increasing plant diversity through the application of one or more of the following conservation practices: (5 points each ) (15 points max)</p> <ul style="list-style-type: none"> <li>• Brush management to improve plant diversity</li> <li>• Re-establishment of native plant species forbs, grasses and shrubs on rangeland.</li> <li>• Establishment of introduced plant species on pasture and hayland that will be managed separately from native plant communities.</li> </ul>	<p>_____ <b>points</b></p>
<p><b>2)</b> Improve <u>grazing distribution</u> of animals with the installation of permanent water sources  <b>with spacing based on terrain and travel distance to draw animals away from heavy use areas. (20 points)</b></p>	<p>_____ <b>points</b></p>
<p><b>3)</b> Facilitate uniform grazing and allow for planned grazing and rest periods to allow for plant growth and reproduction. (choose only 1)</p> <ul style="list-style-type: none"> <li>• Attain minimum forage improvement (10 points)</li> <li>• Attain moderate forage improvement (15 points)</li> <li>• Attain high forage improvement (20 points)</li> <li>• <b>Attain exceptional forage improvement (25 points)</b></li> </ul>	<p>_____ <b>points</b></p>
<p><b>4)</b> Improve deteriorated riparian areas by installing one or more of the following conservation practices. (5 points per practice type – 15 points max.)</p> <ul style="list-style-type: none"> <li>• <b>Fence riparian areas to facilitate proper management, can include water gaps, does not imply exclusion is necessary.</b></li> <li>• <b>Establish adapted grasses, forbs and woody species to protect eroded stream banks and adjacent areas.</b></li> <li>• Install adapted structural erosion control practices to stop stream bank and channel erosion.</li> </ul>	<p>_____ <b>points</b></p>
<p><b>TOTAL POINTS</b>_____</p>	
<p><b>Tie Breaker :</b> Cost/acre treated (Acres that will realize resource improvement due to application of practices) (Lowest cost per acre treated receives highest priority)</p> <p style="text-align: right;"><b>Cost per Acre Treated</b> _____</p>	

## GUNNISON-DOLORES RIVER WATERSHED

### EQIP Ranking Criteria FY-03 Non-Point Source Reduction – Riparian Area Improvement

1) Existing condition using Montana Riparian Assessment Method.

**At risk = 25 points**

Sustainable = 10 points

Not sustainable = 5 points

\_\_\_\_\_points

2) For each type of practice planned: 5 points/practice type ( 60 points max)

Instream structures, (j-hooks, rock weirs, root wads, etc.)

Bank Sloping

Rip-rapping

Bio-engineering (tree revetments, facines, willow mats, etc.)

Fencing

Alternative water

Water gaps/crossings

Plantings (seeding, pole & stakes, sod mats, willow clumps etc.)

Invasive species control (brush management)

Buffers

Channel reconstruction

Predator control

\_\_\_\_\_points

3. 100 divided by cost per foot of stream treated (measured at center line of stream):

\_\_\_\_\_points

**Total Points** \_\_\_\_\_

## GUNNISON DOLORES WATERSHED

### Ranking Criteria FY-03 EQIP REDUCTION IN SOIL EROSION

1. REDUCED SHEET AND RILL EROSION. Is the planned average (weighted for offered fields) sheet and rill rotational soil loss (t/ac/yr) predicted to be:
- a. less than T (20 pts)
  - b. equal to T (10 pts)
  - c. greater than T but less than 2T ( 5 pts)
  - d. greater than 2T ( 0 pts)

**Note: No points shall be awarded if the existing level of treatment is less than T.**  
**(T=Soil Loss Tolerance)**

\_\_\_\_\_points

2. REDUCED WIND EROSION. Is the planned average (weighted for offered fields) wind erosion rotational soil loss (t/ac/yr) predicted to be:
- a. less than T (20 pts)
  - b. equal to T (10 pts)
  - c. greater than T but less than 2T ( 5 pts)
  - d. greater than 2T ( 0 pts)

**Note: No points shall be awarded if the existing level of treatment is less than T.**  
**(T=Soil Loss Tolerance)**

\_\_\_\_\_points

3. REDUCED IRRIGATION-INDUCED EROSION. Is the planned average (weighted for offered fields) irrigation-induced erosion rotational index (t/ac/yr) predicted to be:
- a. 1 or less (20 pts)
  - b. greater than 1 & less than 3 (10 pts)
  - c. 3-5 ( 5 pts)
  - c. >5 ( 0 pts)

\_\_\_\_\_points

4. PERMANENT VEGETATIVE COVER. Is the percent of the cropland acreage in the offered Tract(s) converted to adapted perennial species to be:
- a. 1% or less ( 0 pts)
  - b. 1-15% (15 pts)
  - c. 15-30% (30 pts)
  - d. 30-60% (45 pts)
  - e. >60% (60 pts)

\_\_\_\_\_points

5. SOIL QUALITY. A change in the tillage system results in crops being no-tilled in the rotation:
- a. for every no-till summer annual broadleaf type crop (12 pts)
  - b. for every no-till summer annual grass type crop (10 pts)
  - c. for every no-till winter annual broadleaf type crop ( 8 pts)
  - d. for every no-till winter annual grass type crop ( 6 pts)

summer annual broadleaf crops: sunflower, drybean, soybean  
summer annual grass crops: corn, millet, sorghum  
winter annual broadleaf crops: canola  
winter annual grass crops: wheat, barley

**Examples:**

- (1) If a farmer wants to no-till the sorghum in a winter wheat-sorghum-sunflower-fallow rotation, he gets 10 points.
- (2) If a farmer wants to no-till both the sorghum and sunflower he gets 22 points (12+10).
- (3) If the same farmer wants to go completely no-till, he gets 28 points (12+10+6)

\_\_\_\_\_points

**6. REDUCED GULLY AND EPHEMERAL GULLY EROSION. Is the cropland in the offered field(s) adversely affected by ephemeral gully and/or gully erosions to be:**

- a. High = >50% of cropland area in fields affected (20 pts)
- b. Medium = 25-50% of cropland area in field affected (15 pts)
- c. Low = <25% of cropland area in field affected ( 10 pts)

\_\_\_\_\_points

**TOTAL EROSION POINTS \_\_\_\_\_PTS**

**Tie Breaking Criteria:** 1. Soil Erodibility  
2. Lowest Cost Per Acre

## **Additional Instructions:**

### **Soil Erosion**

**Note: Benchmark value reflects current condition not worse case scenario.**

**1. Use RUSLE calculated for each field.**

2. Use WEQ (management period not annual method).  
Total tons equals sum of all fields offered.

3. Index = Colorado Irrigation Induced Erosion Index.  
**Use dominate Soil K (each field)**  
Weighted Average of Crop Rotation (each field)  
Sum of all fields

4. Gully or Ephemeral erosion.

5. Permanent Vegetative Cover  
A minimum of 75% adaptive perennial grass

Adaptive perennial species include:  
Native & introduced grasses, forbs, shrubs, and trees

**Gunnison-Dolores Watershed  
WILDLIFE**

**EQIP Ranking Criteria FY 2003**

**Projects must have wildlife habitat improvement as the primary intent for use of funds, and fully described habitat management practices in the conservation plan.**

- 1) The proposed contract is located within a priority wildlife area and addresses the target species and habitat. See attached map or descriptions (mule deer, and riparian areas) for locations of wildlife areas.

Within a wildlife area 10  
Outside wildlife areas 0

---

- 2) The proposed practice(s) are intended to maintain, enhance, or restore which habitat types?

Pick one habitat type only for a maximum of 15 points. Habitat type selected must correspond to habitat used by species selected in #3.

Sagebrush-steppe, riparian, mountain shrub, coldwater stream, wetlands	15
Pasture & hayland, warm water stream	7
Pinion-Juniper, deciduous/coniferous woodland, cropland, other	1

---

- 3) Project applies practice(s) for: (You should pick the one highest category or species if a species fits in more than one category or if you have more than one species on this item).

A State species of special concern, a state threatened species, a Federal candidate species, or a declining species. Bold **D** designates wildlife sensitive species for answering question #7.

Includes:

Gunnison's sage grouse <b>D</b>	10 points
Colorado River cutthroat trout	
long-billed curlew <b>D</b>	
kit fox <b>D</b>	
mule deer <b>D</b>	
yellow billed cuckoo <b>D</b>	
OR	

A state endangered or a Federal threatened or endangered species

Includes:	black footed ferret <b>D</b>	7 points
	Colorado pikeminnow	
	humpback chub	
	razorback sucker	
	bonytail chub	
	bald eagle <b>D</b>	
	fish-Native Colorado River species	
	Southwest willow flycatcher <b>D</b>	
	OR	

Declining native species, or economically important species

Includes:	grassland birds <b>D</b>	
	Pheasant <b>D</b>	
	bighorn sheep (desert and Rocky Mountain) <b>D</b>	
	pronghorn <b>D</b>	5 points
	elk <b>D</b>	
	trout and mountain white fish (stream habitat only)	
	turkey <b>D</b>	
	OR	



Species with stable or increasing populations, or not otherwise listed.  
2 points

\_\_\_\_\_

4) Practices planned address limiting factors for target species. Species specific practices found in Biology Technical Notes # 10-20 are worth 10 points. If the project is applying practices not listed in the Biology Tech Notes, the local Work Group may assign a point value in concurrence with the NRCS Area Biologist or other designated Area representative. Maximum of 10 points.

\_\_\_\_\_

5) Will the planned practices alleviate or increase an identified game damage problem?

Alleviate damage = 5 pts  
No effect = 0 pts  
Increase damage = -minus 5 pts

\_\_\_\_\_

6) Two points for each partner contributing dollars towards the participant's cost. Pheasants Forever, Ducks Unlimited, etc. Landowners and NRCS do not count as partners. No more than 6 points (3 different partners) maximum for this factor.

\_\_\_\_\_

7) Proximity to occupied dwelling or other area of measured from dwelling to center of area treated. For disturbance sensitive species designated with a bold **D** in question #3. Non-sensitive species receive 10 points.

> 1/4 mile = 10  
1/8 - 1/4 mile = 5  
< 1/8 mile = 0

\_\_\_\_\_

8) Will project have significant positive impacts on water quality? (i.e. shallow water wetland, riparian buffer, buffers adjacent to perennial water etc.

Yes = 5  
No = 0

\_\_\_\_\_

9) Do planned practices encourage the establishment or maintenance of native vegetation?

Yes = 5 pts  
No = 0 pts

\_\_\_\_\_

**Total points (Maximum of 76 points possible)**

\_\_\_\_\_

### Tie Breaker

Cost share dollars per acre treated (acres actually physically changed) (Lowest cost per acre treated receives highest priority)

Cost Per Acre Treated \_\_\_\_\_

## Priority Wildlife Areas

(See attached map)

## Mule Deer Wildlife Area

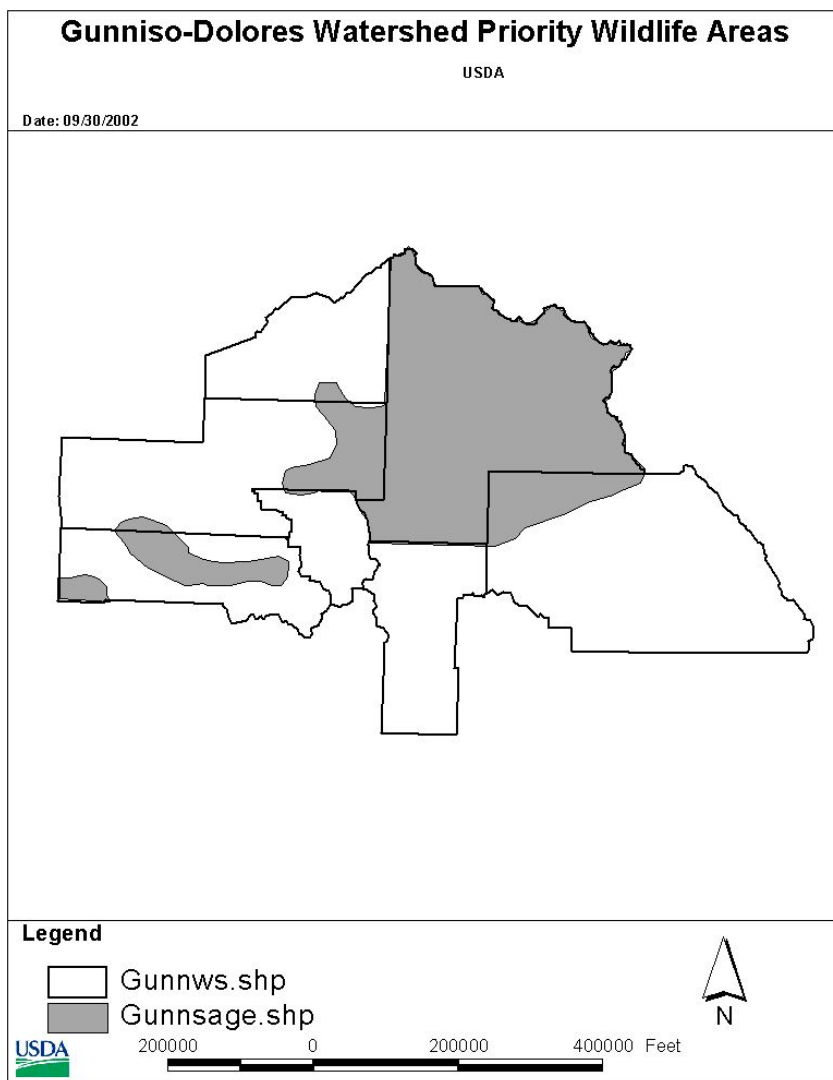
The mule deer wildlife area covers all land west or south of a line running from Interstate 25 at the Wyoming border, south to U.S. Highway 50, east to U.S. Highway 287/385 and south to the New Mexico border.

## Riparian Habitat Areas

Riparian areas within designated critical habitats (as per USFWS designation) in the Colorado and San Juan River Basins for the various listed fish, southwest willow flycatcher, and yellow-billed cuckoo. Contact Area or State Biologist if unsure of critical habitat locations.

Gunnison's sage grouse

(See attached map)



## GUNNISON-DOLORES RIVER WATERSHED

### Ranking Criteria FY-03 EQIP FOREST MANAGEMENT

1) Forest management plan approved by qualified forester in place: 40 points

\_\_\_\_\_ points

2) Forest improvement practices applied: (5 points per practice type)

Thinning for woodland improvement  
Patch cut for woodland improvement  
Cultural pest management  
Pruning  
Tree planting  
Critical Area Seeding  
Site preparation for regeneration  
Use exclusion  
Prescribed burn  
Erosion control practices  
Forest access roads  
Fire breaks  
Wind break

\_\_\_\_\_ points

3) Plan is part of an area forest management plan (involves adjacent properties)  
(10 points)

\_\_\_\_\_ points

4) Includes planting of special value such as energy saving or public safety.  
(e.g. living snow fence on school bus route). (10 points)

\_\_\_\_\_ points

**Total Points** \_\_\_\_\_

**Tie breaker:** Cost per acre treated ( acres that will realize resource improvement due to applied practices) (Lowest cost per acre treated receives highest priority)

**Cost per Acre Treated** \_\_\_\_\_

**NRCS Colorado Environmental Quality Incentive Program/EQIP  
FY 2003 EQIP Ranking Criteria - Non-Point Source Reduction – Waste Management**

**You can only use ranking A. or B. not both.**

**A. Operations – animal confinement (usually less than 50 animals) areas :**  
**(Use 1a or 1b not both)**

**1a)** Practices reduce pollution contributions to water course:  
(10 points/each practice type) **30 points max**  
Diversion and collection  
Filter strips and/or buffers  
Water conveyance  
Fencing  
Alternate watering sources  
Collection and transport  
Composting facility

**1b)** Relocate facility (**30 points.**) Points \_\_\_\_\_

**2)** Ground water = 100/depth in feet to ground water (10 points. max.)  
\_\_\_\_\_ Points

**3)** Distance to surface water = 1000/distance in feet to surface water (10 points max.)  
\_\_\_\_\_ Points

**4)** Documented water quality (associated to animal waste pollution)  
problem in drainage. (10 points)  
\_\_\_\_\_ Points

**5)** Proximity to urban development (4 houses per 40 acres)  
                    < ¼ mile                      10 points  
                    ¼ to ½ mile                5 points  
Points \_\_\_\_\_  
                    > ½ mile                    0 points

**Total points** for operation – animal confinement unit  
\_\_\_\_\_

**B. Operations-large livestock and feeding operations (usually dairies and feed lots).**

**1) Locality of existing facility:**

1A. In a 100 yr. Floodplain (yes = 10 points)	points
_____	
1B. Depth to groundwater (10 points)	points
_____	
100/depth in feet to groundwater	
1C. Distance to surface water (10 points)	points _____
1000/Distance in feet to surface water	

**2) Plan Components:**

	adequate 0.0 pts.	exists inadequate 5 pts.	nonexistent 10 pts.
Collection and Transport	_____	_____	_____
Storage or Treatment	_____	_____	_____
Seepage Control	_____	_____	_____
Transfer and Utilization	_____	_____	_____
			points _____

Total points operations –large livestock and feeding operations\_\_\_\_\_

**NRCS Colorado Environmental Quality Incentive Program/EQIP  
2003 Salinity Ranking Criteria - Gunnison Dolores Watershed  
Lower Gunnison, Delta, and Montrose**

**SALT REDUCED** (1 point per ton of salt reduced)

**WATER CONVEYANCE**

- On-Farm (< 4.5' WP) \_\_\_\_\_ Feet/100 = \_\_\_\_\_ X .64 = \_\_\_\_\_ Tons Salt Reduced
- 4.5' WP \_\_\_\_\_ Feet/100 = \_\_\_\_\_ X 2.4 = \_\_\_\_\_ Tons Salt Reduced
- 9.5' WP \_\_\_\_\_ Feet/100 = \_\_\_\_\_ X 4.8 = \_\_\_\_\_ Tons Salt Reduced

**SYSTEM INSTALLATION (IWM)**

- System **WITHOUT** ANY Surge, Drip, Sprinkler, Leveling, Drainage \_\_\_\_\_ (15 POINTS)
- System **WITH** SOME OR ALL Surge, Drip, Sprinkler, Leveling, Drainage \_\_\_\_\_ (30 POINTS)

**Tons Salt Reduced X 1 pt. = \_\_\_\_\_ POINTS**  
**System Points \_\_\_\_\_ POINTS**

**TOTAL \_\_\_\_\_ POINTS**

**SEEPAGE REDUCTION** (1 point per 2 Acre Feet of Seepage Reduction)

**WATER CONVEYANCE**

- On-farm (< 4.5' WP) \_\_\_\_\_ Feet/100 = \_\_\_\_\_ X .2 = \_\_\_\_\_ Acre Feet Seepage Reduced
- 4.5' Wetted perimeter \_\_\_\_\_ Feet/100 = \_\_\_\_\_ X .74 = \_\_\_\_\_ Acre Feet Seepage Reduced
- 9.5' Wetted perimeter \_\_\_\_\_ Feet/100 = \_\_\_\_\_ X 1.48 = \_\_\_\_\_ Acre Feet Seepage Reduced

**SYSTEM INSTALLATION (IWM)**

- System **WITHOUT** ANY Surge, Drip, Sprinkler, Leveling, Drainage \_\_\_\_\_ (05 POINTS)
- System **WITH** SOME OR ALL Surge, Drip, Sprinkler, Leveling, Drainage \_\_\_\_\_ (15 POINTS)

**Acre Feet Seepage Reduction / 2 \_\_\_\_\_ POINTS**  
**System Points \_\_\_\_\_ POINTS**

**TOTAL \_\_\_\_\_ POINTS**

**SOIL EROSION REDUCTION (IRRIGATION INDUCED)** (maximum total points of 25)

**SYSTEM INSTALLATION WITH IWM**

- **Irrigation System – Drainage work only** **POINTS)** OT/Ac Savings= \_\_\_\_\_ Points ( 0
- Irrigation System – Gated Pipe, Cement Ditch, Surge 1T/Ac Savings= \_\_\_\_\_ Points(10 POINTS)
- Irrigation System Leveling 3T/Ac Savings= \_\_\_\_\_ Points(15 POINTS)
- Irrigation System – Sprinkler, Drip 6T/Ac Savings= \_\_\_\_\_ Points(25 POINTS)

**TOTAL POINTS \_\_\_\_\_ POINTS**

**WILDLIFE** ( maximum total points of 150)  
Wetland/Upland Acres Enhanced or Created

. 25 TO 1 ACRE 30 POINTS \_\_\_\_\_  
> 1 TO 2 ACRE 60 POINTS \_\_\_\_\_  
>2 TO 3 ACRE 90 POINTS \_\_\_\_\_  
> 3 TO 4 ACRE 120 POINTS \_\_\_\_\_  
>4 TO 5 ACRE 150 POINTS \_\_\_\_\_

**TOTAL POINTS**

\_\_\_\_\_

**TOTAL POINTS** \_\_\_\_\_

**TIE BREAKER – Smallest cost per ton of salt reduced. (Salt cost share only, amortized over 25 years divided by total tons salt reduced equals cost per ton salt reduced). **CONTRACTS WITH SALT REDUCTION COSTS IN EXCESS OF \$100.00 PER ACRE WILL NOT BE ELIGIBLE FOR FUNDING.****

**Cost Per Ton of Salt Reduced** \_\_\_\_\_

Salt Cost share \$ \_\_\_\_\_ X Amortization Factor .07915 = \$ \_\_\_\_\_ / Tons of salt saved \_\_\_\_\_ = \$ \_\_\_\_\_ Cost per Ton  
(6 1/8% for 25 years)